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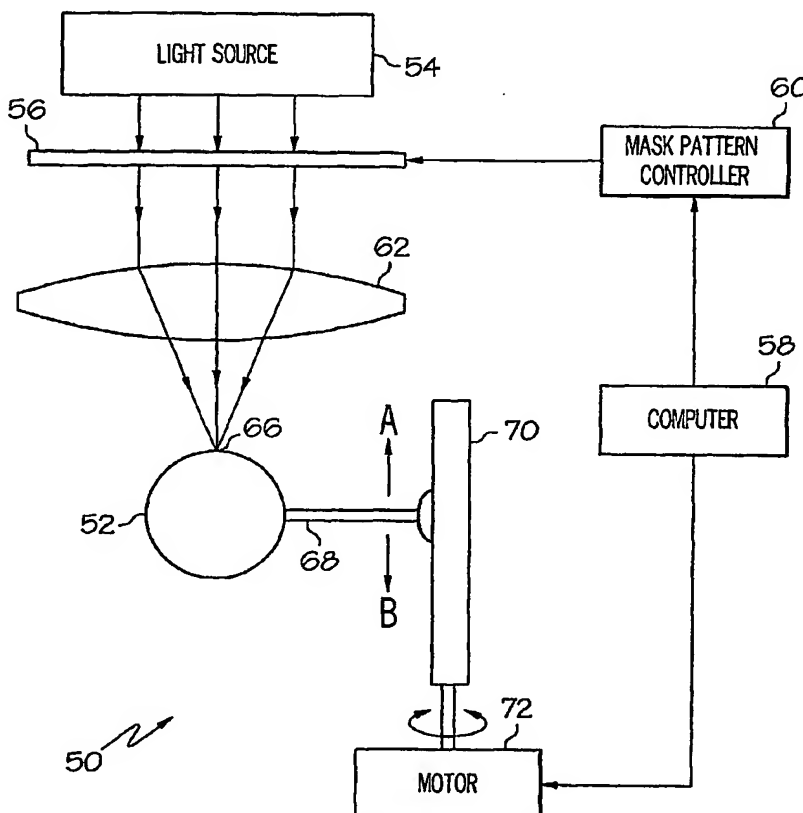
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[Continued on next page]

(54) Title: APPARATUS AND METHOD OF EXPOSING A SEMICONDUCTOR DEVICE HAVING A CURVED SURFACE TO LIGHT



(57) Abstract: A semiconductor manufacturing station (50) exposes light on a surface area of a spherical semiconductor device or ball (52). A mask (56) receives light from a light source (54) and passing the light to the surface area of the semiconductor ball according to a pattern of the mask. A lens (62) is positioned between the mask and the semiconductor ball such that a focal distance between the lens and the ball is variable to focus the light passed by the pattern of the mask on surface areas of the object. The pattern of the mask is made a series of concentric circles or rings (74-80) to focus light on desired surfaces of the semiconductor ball. The manufacturing system can be a plurality of optical stations (104-110) each configured to expose a circle or ring on the surface of the semiconductor ball as it passes in proximity to the plurality of optical stations.

WO 2004/063812 A1